DATE: 10/23/2001 RAW SEQUENCE LISTING TIME: 10:07:33 PATENT APPLICATION: US/09/831,047B

Input Set : A:\sequence.txt

Output Set: N:\CRF3\10232001\1831047B.raw

```
4 <110> APPLICANT: The Wistar Institute of Anatomy and Biology
             The Trustees of the University of Pennsylvania
             Blaszczyk-Thurin, Magdalena
             Kieber-Emmons, Thomas
     9 <120> TITLE OF INVENTION: Compositions and Methods For Treatment of Cancer
    11 <130> FILE REFERENCE: WST93AUSA
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/831,047B
C--> 14 <141> CURRENT FILING DATE: 2001-08-14
     16 <150> PRIOR APPLICATION NUMBER: 60/107,478
     17 <151> PRIOR FILING DATE: 1998-11-06
                                                             ENTERED
     19 <160> NUMBER OF SEQ ID NOS: 121
     21 <170> SOFTWARE: PatentIn Ver. 2.0
     23 <210> SEQ ID NO: 1
     24 <211> LENGTH: 12
     25 <212> TYPE: PRT
     26 <213> ORGANISM: Artificial Sequencé
     28 <220> FEATURE:
     29 <223> OTHER INFORMATION: Description of Artificial Sequence:
              peptido-mimetic of a Lewis antigen /
                                                                              RECEIVED
     32 <400> SEQUENCE: 1
     33 Asp Leu Trp Asp Trp Val Val Gly Lys Pro Ala Gly
                                                                                 SED 1 1 2002
     34 1
     37 <210> SEQ ID NO: 2
     38 <211> LENGTH: 12
                                                                             LECH CENTER 1600/2900
     39 <212> TYPE: PRT
     40 <213> ORGANISM: Artificial Sequence
      42 <220> FEATURE:
     43 <223> OTHER INFORMATION: Description of Artificial Sequence:
              peptido-mimetic of a Lewis antigen
      4 4
      46 <400> SEQUENCE: 2
      47 Asp Ala Trp Asp Trp Val Val Gly Lys Pro Ala Gly
      48 1
      51 <210> SEQ ID NO: 3
      52 <211> LENGTH: 12
      53 <212> TYPE: PRT
      54 <213> ORGANISM: Artificial Sequence
      56 <220> FEATURE:
      57 <223> OTHER INFORMATION: Description of Artificial Sequence:
               peptido-mimetic of a Lewis antigen \checkmark
      60 <400> SEQUENCE: 3
      61 Asp Asp Trp Asp Trp Val Val Gly Lys Pro Ala Gly
      65 <210> SEQ ID NO: 4
      66 <211> LENGTH: 12
      67 <212> TYPE: PRT
      68 <213> ORGANISM: Artificial Sequence
      70 <220> FEATURE:
```

DATE: 10/23/2001 RAW SEQUENCE LISTING TIME: 10:07:33 PATENT APPLICATION: US/09/831,047B

Input Set : A:\sequence.txt

Output Set: N:\CRF3\10232001\1831047B.raw

```
71 <223> OTHER INFORMATION: Description of Artificial Sequence:
72 peptido-mimetic of a Lewis antigen
74 <400> SEQUENCE: 4
75 Asp Tyr Trp Asp Trp Val Val Gly Lys Pro Ala Gly
79 <210> SEQ ID NO: 5
80 <211> LENGTH: 12
81 <212> TYPE: PRT
82 <213> ORGANISM: Artificial Sequence, /
84 <220> FEATURE:
85 <223> OTHER INFORMATION: Description of Artificial Sequence:
86 peptido-mimetic of a Lewis antigen /
88 <400> SEQUENCE: 5
89 Asp Glu Trp Asp Trp Val Val Gly Lys Pro Ala Gly
90 1
93 <210> SEQ ID NO: 6
94 <211> LENGTH: 12
95 <212> TYPE: PRT
96 <213> ORGANISM: Artificial Sequence
98 <220> FEATURE:
99 <223> OTHER INFORMATION: Description of Artificial Sequence:
         peptido-mimetic of a Lewis antigen
 102 <400> SEQUENCE: 6
 103 Asp Lys Trp Asp Trp Val Val Gly Lys Pro Ala Gly
 104 1
 107 <210> SEQ ID NO: 7
 108 <211> LENGTH: 12
 109 <212> TYPE: PRT
 110 <213> ORGANISM: Artificial Sequence
 112 <220> FEATURE:
 113 <223> OTHER INFORMATION: Description of Artificial Sequence:
 peptido-mimetic of a Lewis antigen
 116 <400> SEQUENCE: 7
 117 Asp Arg Trp Asp Trp Val Val Gly Lys Pro Ala Gly
 118 1
 121 <210> SEQ ID NO: 8
 122 <211> LENGTH: 12
 123 <212> TYPE: PRT
 124 <213> ORGANISM: Artificial Sequence
 126 <220> FEATURE:
 127 <223> OTHER INFORMATION: Description of Artificial Sequence:
           peptido-mimetic of a Lewis antigen
 130 <400> SEQUENCE: 8
 131 Asp Ser Trp Asp Trp Val Val Gly Lys Pro Ala Gly
  132 1
  135 <210> SEQ ID NO: 9
  136 <211> LENGTH: 12
  137 <212> TYPE: PRT
  138 <213> ORGANISM: Artificial Sequence
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/831,047B

DATE: 10/23/2001
TIME: 10:07:33

Input Set : A:\sequence.txt

Output Set: N:\CRF3\10232001\1831047B.raw

```
140 <220> FEATURE:
141 <223> OTHER INFORMATION: Description of Artificial Sequence:
peptido-mimetic of a Lewis antigen
144 <400> SEQUENCE: 9
145 Asp Leu His Asp Trp Val Val Gly Lys Pro Ala Gly
146 1 5
149 <210> SEQ ID NO: 10
150 <211> LENGTH: 12
151 <212> TYPE: PRT
152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: Description of Artificial Sequence:
         peptido-mimetic of a Lewis antigen
158 <400> SEQUENCE: 10
159 Asp Leu Tyr Asp Trp Val Val Gly Lys Pro Ala Gly
                    5
160 1
163 <210> SEQ ID NO: 11
164 <211> LENGTH: 12
165 <212> TYPE: PRT
166 <213> ORGANISM: Artificial Sequence
168 <220> FEATURE:
169 <223> OTHER INFORMATION: Description of Artificial Sequence:
peptido-mimetic of a Lewis antigen
172 <400> SEQUENCE: 11
173 Asp Leu Phe Asp Trp Val Val Gly Lys Pro Ala Gly
174 1
177 <210> SEQ ID NO: 12
 178 <211> LENGTH: 12
 179 <212> TYPE: PRT
 180 <213> ORGANISM: Artificial Sequence
 182 <220> FEATURE:
 183 <223> OTHER INFORMATION: Description of Artificial Sequence:
 184 peptido-mimetic of a Lewis antigen
 186 <400> SEQUENCE: 12
 187 Asp Leu Met Asp Trp Val Val Gly Lys Pro Ala Gly
 188 1 5
 191 <210> SEQ ID NO: 13
 192 <211> LENGTH: 12
 193 <212> TYPE: PRT
 194 <213> ORGANISM: Artificial Sequence
 196 <220> FEATURE:
 197 <223> OTHER INFORMATION: Description of Artificial Sequence:
 198 peptido-mimetic of a Lewis antigen
 200 <400> SEQUENCE: 13
 201 Asp Leu Ala Asp Trp Val Val Gly Lys Pro Ala Gly
 202 1
 205 <210> SEQ ID NO: 14
 206 <211> LENGTH: 12
 207 <212> TYPE: PRT
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/831,047B

DAIE: 10/23/2001
TIME: 10:07:33

Input Set : A:\sequence.txt

Output Set: N:\CRF3\10232001\I831047B.raw

```
208 <213> ORGANISM: Artificial Sequence
210 <220> FEATURE:
211 <223> OTHER INFORMATION: Description of Artificial Sequence:
         peptido-mimetic of a Lewis antigen
214 <400> SEQUENCE: 14
215 Asp Leu Glu Asp Trp Val Val Gly Lys Pro Ala Gly
                     5
216 1
219 <210> SEQ ID NO: 15
220 <211> LENGTH: 12
221 <212> TYPE: PRT
222 <213> ORGANISM: Artificial Sequence
224 <220> FEATURE:
225 <223> OTHER INFORMATION: Description of Artificial Sequence:
226 peptido-mimetic of a Lewis antigen
228 <400> SEQUENCE: 15
229 Asp Leu Asp Asp Trp Val Val Gly Lys Pro Ala Gly
                     5
230 1
233 <210> SEQ ID NO: 16
234 <211> LENGTH: 12
235 <212> TYPE: PRT
236 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
239 <223> OTHER INFORMATION: Description of Artificial Sequence:
          peptido-mimetic of a Lewis antigen
242 <400> SEQUENCE: 16
243 Asp Leu Lys Asp Trp Val Val Gly Lys Pro Ala Gly
                     5
244 1
247 <210> SEQ ID NO: 17
248 <211> LENGTH: 12
249 <212> TYPE: PRT
250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: Description of Artificial Sequence:
          peptido-mimetic of a Lewis antigen
 254
 256 <400> SEQUENCE: 17
 257 Asp Leu Arg Asp Trp Val Val Gly Lys Pro Ala Gly
 261 <210> SEQ ID NO: 18
 262 <211> LENGTH: 12
 263 <212> TYPE: PRT
 264 <213> ORGANISM: Artificial Sequence
 266 <220> FEATURE:
 267 <223> OTHER INFORMATION: Description of Artificial Sequence:
 268 peptido-mimetic of a Lewis antiger
 2 0 <400> SEQUENCE: 18
 271 Asp Leu Ser Asp Trp Val Val Gly Lys Pro Ala Gly
           5
 272 1
 275 <210> SEQ ID NO: 19
 276 <211> LENGTH: 12
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/831,047B

DATE: 10/23/2001
TIME: 10:07:33

Input Set : A:\sequence.txt

Output Set: N:\CRF3\10232001\1831047B.raw

```
277 <212> TYPE: PRT
278 <213> ORGANISM: Artificial Sequence
280 <220> FEATURE:
281 <223> OTHER INFORMATION: Description of Artificial Sequence:
282 peptido-mimetic of a Lewis antigen'
284 <400> SEQUENCE: 19
285 Asp Leu Trp Glu Trp Val Val Gly Lys Pro Ala Gly
289 <210> SEQ ID NO: 20
290 <211> LENGTH: 12
291 <212> TYPE: PRT
292 <213> ORGANISM: Artificial Sequence
294 <220> FEATURE:
295 <223> OTHER INFORMATION: Description of Artificial Sequence:
          peptido-mimetic of a Lewis antigen -
298 <400> SEQUENCE: 20
299 Asp Leu Trp Ser Trp Val Val Gly Lys Pro Ala Gly
                     5
300 1
303 <210> SEQ ID NO: 21
304 <211> LENGTH: 12
305 <212> TYPE: PRT
306 <213> ORGANISM: Artificial Sequence
308 <220> FEATURE:
309 <223> OTHER INFORMATION: Description of Artificial Sequence:
310 peptido-mimetic of a Lewis antigen/
 312 <400> SEQUENCE: 21
 313 Asp Leu Trp Pro Trp Val Val Gly Lys Pro Ala Gly
 314 1
 317 <210> SEQ ID NO: 22
 318 <211> LENGTH: 12
 319 <212> TYPE: PRT
 320 <213> ORGANISM: Artificial Sequence
 322 <220> FEATURE:
 323 <223> OTHER INFORMATION: Description of Artificial Sequence:
          peptido-mimetic of a Lewis antigen/
 326 <400> SEQUENCE: 22
 327 Asp Leu Trp Val Trp Val Val Gly Lys Pro Ala Gly
 328 1
 331 <210> SEQ ID NO: 23
 332 <211> LENGTH: 12
 333 <212> TYPE: PRT
 334 <213> ORGANISM: Artificial Sequence
 336 <220> FEATURE:
 337 <223> OTHER INFORMATION: Description of Artificial Sequence:
           peptido-mimetic of a Lewis antigen
 340 <400> SEQUENCE: 23
 341 Asp Leu Trp Met Trp Val Val Gly Lys Pro Ala Gly
                       5
 342 1
 345 <210> SEQ ID NO: 24
```

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/831,047B

DATE: 10/23/2001 TIME: 10:07:34

Input Set : A:\sequence.txt

Output Set: N:\CRF3\10232001\1831047B.raw

L:13 M:270 C: Current Application Number differs, Replaced Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:1419 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:100
L:1419 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:100
L:1419 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100
L:1573 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:111
L:1573 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111
L:1587 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:112
L:1587 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:112
L:1587 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:112
L:1587 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:112